

Remarks

This paper is responsive to the Final Rejection dated January 25, 2006. Claims 1-8 remain for consideration.

Withdrawal of the objection and -112 rejection is noted with gratitude.

Claims 2-4 are rejected as indefinite. These claims have been amended to identify the aspect of the manifolds and insulator panels and how this aspect relates to the stated properties. Claims 2-4 recite an additional characteristic of the structure of claim 1. MPEP 2173.05(g) states: "structural attributes of interrelated component parts of the claimed assembly" serve to define the invention. It is requested that the -112 rejection be withdrawn in view of the amendments.

Claims 1-8 are rejected as anticipated by Katz for reasons of record.

Claim 1 requires either a single wall, in which case there must be a vacuum insulated panel (VIP) or a gas filled panel (GFP) disposed inside or outside that wall.

The VIP or GFP is in addition to the single wall in claim 1. Katz does not have anything but a manifold chamber wall 17.

The vacuum insulated panel is defined at page 5, line 25 through page 6, line 4, "a vacuum insulated panel (VIP) 59, as shown in Fig. 4. VIPs consist of a filler material 60 called a "core" that is encapsulated in a barrier film 61, which may simply be plastic, or may be a plastic film which is sputter coated with thin metal film, or may be an aluminum or other metal thin film reinforced by plastic film laminations on each side. The barrier film is evacuated to a pressure between 0.001 Torr (0.0013mbar) and 1.0 Torr (1.3mbar), and thereafter sealed." Therefore, the inside of a normal reactant gas manifold (17 in Katz) is not a VIP.

The gas filled panel is defined at page 7, lines 2-9, "a gas filled panel (GFP) 63 which uses a high molecular weight, low thermal conductivity gas within a hermetic polymer film bag 64 to provide extraordinary thermal insulation. Within the essentially-hermetic barrier provided by the film 64, a cellular structure 65, called a baffle, is filled with the gas. Argon gas provides an effective thermal

conductivity of 0.020 W/m°K, krypton gas provides a thermal conductivity of 0.012 W/m°K, and xenon gas provides a thermal conductivity of 0.007 W/m°K." Therefore, the manifold 17 of Katz is not a GFP.

The "second porous medium or gasket 29" is not an insulator: "Positive ions will migrate through the electrolyte within the porous sealing media 29...." (col. 3, lines 22-24).

MPEP 2111 states "Claims must be 'given their broadest reasonable interpretation consistent with the disclosure.'" MPEP 2111.01 III states "Where an explicit definition is provided by the applicant for a term, that definition will control the interpretation of the term as it is used in the claim." The reference character 17 in Katz refers to a reactant gas manifold which also comprises a gas filled space (not a GFP) as defined. There is no VIP or GFP in Katz.

Claim 1 alternatively calls for a manifold comprising a double wall (there is none in Katz) forming a chamber which contains either a vacuum (not in Katz), a low thermal conductivity gas (not in Katz), a VIP or a GFP, as defined, (neither of which appear in Katz).

Claim 1 also calls for an insulator panel which is either a hollow chamber containing a vacuum (not in Katz) or a low thermal conductivity gas (not in Katz), or the insulator panel may be a vacuum insulated panel (VIP) as defined in the present specification (there being none in Katz) or a gas filled panel (GFP) as defined in the specification, there being none in Katz. Claims 2-4 depend from claim 1 and are patentable for the same reasons.

Claim 5 recites the endplates of claim 1, which must be either hollow with a vacuum or a low thermal conductivity gas (there is none in Katz) or a vacuum insulated panel (VIP), as defined in the specification, or a gas filled panel (GFP) as defined in the specification, there being neither in Katz. Claim 6 depends from claim 5 and is patentable for the same reason. Additionally, Katz certainly does not

disclose a vacuum insulated panel (VIP) or gas filled panel (GFP), as defined in the specification, with an external film.

Claim 7 calls for the same manifold as in claim 1, which is either a single wall with a vacuum insulated panel (VIP), as defined, or a gas filled panel (GFP), as defined, neither of which is disclosed in Katz. Or, the manifold must have a double wall which contains either a vacuum, a low thermal conductivity gas, a vacuum insulated panel (VIP), as defined, or a gas filled panel (GFP), as defined, none of which is disclosed in Katz, as described with respect to claim 1 hereinbefore.

Claim 8 is patentable as depending from claim 7.

For all the foregoing reasons, it is requested that the rejection of claims 1-8 as anticipated by Katz be withdrawn.

Should the foregoing not be persuasive, a telephone call is earnestly solicited.

Respectfully submitted,



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Date: March 22, 2006